

Question	Answer																																				
1	a) Yes $3 + 3 + 4 = 10$ b) ● = 2 c) multiple possible answers, e.g. ▲ = 1 ● = 8 ▲ = 2 ● = 6 ▲ = 2.5 ● = 5																																				
2	<table border="1" data-bbox="211 499 819 758"> <tr> <td><i>a</i></td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td><i>2a</i></td> <td>0</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>12</td> <td>14</td> </tr> <tr> <td><i>b</i></td> <td>14</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>2</td> <td>0</td> </tr> <tr> <td><i>2a + b</i></td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> </tr> </table>	<i>a</i>	0	1	2	3	4	5	6	7	<i>2a</i>	0	2	4	6	8	10	12	14	<i>b</i>	14	12	10	8	6	4	2	0	<i>2a + b</i>	14	14	14	14	14	14	14	14
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<i>2a + b</i>	14	14	14	14	14	14	14	14																													
3	a) <table border="1" data-bbox="261 803 672 1062"> <tr> <td><i>c</i></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td><i>3c</i></td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> </tr> <tr> <td><i>d</i></td> <td>1</td> <td>4</td> <td>7</td> <td>10</td> <td>13</td> </tr> <tr> <td><i>3c - d</i></td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table> b) If <i>c</i> was 6, then <i>d</i> would be greater than 15	<i>c</i>	1	2	3	4	5	<i>3c</i>	3	6	9	12	15	<i>d</i>	1	4	7	10	13	<i>3c - d</i>	2	2	2	2	2												
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4	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;">$x = 20, y = 20$</div> <div style="border: 2px solid blue; border-radius: 10px; padding: 5px; margin-bottom: 10px;">$x = 10, y = 20$</div> <div style="border: 1px solid orange; padding: 5px; margin-bottom: 10px;">$x = 20, y = 10$</div> <div style="border: 2px solid blue; border-radius: 10px; padding: 5px; margin-bottom: 10px;">$x = 35, y = 70$</div> <div style="border: 2px solid blue; border-radius: 10px; padding: 5px;">$y = 90, x = 45$</div> </div>																																				

Y6 – Spring – Block 2 – Step 10 – Solve problems with two unknowns Answers (continued)

Question	Answer
5	a) $2x + 2y = 28$ b) $x = 1, y = 13$ $x = 2, y = 12$ $x = 3, y = 11$ $x = 4, y = 10$ $x = 5, y = 9$ $x = 6, y = 8$ $x = 7, y = 7$ $x = 8, y = 6$ $x = 9, y = 5$ $x = 10, y = 4$ $x = 11, y = 3$ $x = 12, y = 2$ $x = 13, y = 1$ Work systematically from $x = 1$, increasing x by 1 each time.
6	10 pencils, 0 pens 7 pencils, 2 pens 4 pencils, 4 pens 1 pencil, 6 pens
7	1 7 7 9 1 5 9 9
8	a) multiple possible answers, e.g. $a = 3, b = 8$ b) There are eight possible answers with integer values for a and b : $a = 1, b = 24$ $a = 2, b = 12$ $a = 3, b = 8$ $a = 4, b = 6$ $a = 6, b = 4$ $a = 8, b = 3$ $a = 12, b = 2$ $a = 24, b = 1$